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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/236,995	01/26/1999	PRAMOD MAHAJAN	5718-34	9734

29122 7590 08/06/2003

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EXAMINER

KATCHEVES, KONSTANTINA T

ART UNIT	PAPER NUMBER
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1636

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DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/236,995

Applicant(s)

MAHAJAN ET AL.

Examiner

Konstantina Katcheves

Art Unit

1636

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☐ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
6. ☒ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 1-23.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 24-33.


Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

Konstantina Katcheves

Continuation of 5. does NOT place the application in condition for allowance because:  
As previously discussed, Applicant argues that AJ222589 (Babiyachuk et al.) lacks two amino acids found within the second functional zinc fingers and that Ikejima teaches that poly(ADP-ribose) polymerase (PARP) that lack one of two zinc fingers lack enzymatic activity. First, Applicant should note that the present claims recite an isolated DNA molecule comprising a sequence having at least 90% sequence identity. The sequence of AJ222589 has 95% sequence identity with the present sequence. Second, Applicant is reminded that the classic zinc finger motif of poly-ADP-ribose polymerase comprises Cys-X2-Cys-X28-30-His-X2-Cys. Although AJ222589 fails to contain a necessary component of the zinc finger motif, the motif was known in the art such that one of skill in the art would have motivated to modify the sequence of AJ222589 so that it would now contain two functional motif and provide for a functional PARP. Ikejima et al. establish the functional relevance of the zinc fingers and teach that deletion or mutation of the classic zinc finger domain eliminates the ability of poly ADP ribose polymerase to bind DNA. Therefore, Ikejima implicitly teaches one of skill in the art to provide for two functional zinc finger domains in order to provide a protein with enzymatic activity. Bibiyachuk et al., which disclose that the AJ222589 sequence, show a well conserved DNA binding domain comprising two zinc fingers. See page 637. Given the state of the art that the classic structure of a zinc finger domain is well known and the teachings of Ikejima, one of ordinary skill in the art would be sufficiently motivated to modify the sequence claimed by altering the zinc finger domain of AJ222589 to provide for two functional zinc fingers and thus a functional enzyme.

In Applicant's request for reconsideration, Applicant has argued that the fact that the references can be combined does not make appropriate or obvious to do so. For the reasons of record and those above, it is the examiners position that it would have been obvious to combine Ikejima and AJ222589. Applicant also has argued that Ikejima et al. do not teach or suggest that because human poly(ADP ribose polymerase requires two zinc fingers that one would be motivated to make two functional zinc fingers in maize. Ikejima et al. provides adequate motivate to one of skill in the art to make an additional zinc finger in two sequences having the same cellular function. It is well known to those in the art, and the authors of Ikejima et al. that many binding domains comprise more than a single zinc finger in order to substantially enhance DNA binding. Thus, modifying the known zinc finger domain in the poly (ADP-ribose) polymerase of AJ222589 would have been obvious to the ordinary skilled artisan.

  
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